IN THE CLAIMS

Please amend the claims as follows:

1. – 8. (Canceled).

9. (Currently Amended): An article comprising a layer and a substrate, wherein the layer is obtained by ~~thermal~~ a sintering treatment of an aqueous dispersion that has been applied to a substrate, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and the titanium dioxide content of the powder ranges from 2 to 20 wt.%.

10. (Previously Presented): The article as claimed in claim 9, wherein the thickness of the layer ranges from 100 nm to 1 mm.

11. (Previously Presented): The article as claimed in claim 9, wherein the thickness of the layer ranges from 1 μm to 50 μm.

12. (Previously Presented): The article as claimed in claim 9, wherein the thickness of the layer ranges from 5 μm to 15 μm.

13. (Previously Presented): The article as claimed in claim 9, wherein the BET surface area of the powder ranges from 5 to 500 $m^2/g$.

14. – 15. (Canceled).

16. (Previously Presented): The article as claimed in claim 9, wherein the substrate is selected from the group consisting of borosilicate glass, silica glass, glass ceramic, and a material with a very low coefficient of expansion.

17. (Previously Presented): The article as claimed in claim 9, further comprising less than 0.5 wt.% of impurities.

18. (Withdrawn): A process for preparing an article as claimed in claim 9, comprising applying a dispersion containing a silicon/titanium mixed oxide powder to a substrate, and thermal treatment sintering the dispersion applied to the substrate to form a layer.

19. (Withdrawn): The process as claimed in claim 18, further comprising preparing the dispersion by flame hydrolyzing a silicon/titanium mixed oxide powder, wherein the proportion of powder ranges from 0.1 to 60 wt.% in the dispersion.

20. (Withdrawn): A method comprising coating a material comprising forming a layer by thermal treating an aqueous dispersion that has been applied to said material, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and the titanium dioxide content of the powder ranges from 2 to 20 wt.%. and wherein said material is selected from the group consisting of an ultra-low expansion material a photocatalytic material, a self-cleaning mirror, a superhydrophilic constituent, a lens, a container for a gas and a container for a liquid.

21. (Previously Presented): An article comprising a layer and a substrate, wherein the layer is obtained by thermal treatment of an aqueous dispersion that has been applied to a substrate, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and wherein said silicon/titanium mixed oxide powder is a mixture of powders comprising at least one powder having a BET surface area of at least 130 $m^2/g$ and at least one powder having a BET surface area of at most 90 $m^2/g$, wherein the ratio by weight of the powders with a lower BET to the powders with a higher BET surface area ranges from 40:60 to 99.5:0.5.

22. (Previously Presented): The article as claimed in claim 21, wherein the thickness of the layer ranges from 100 nm to 1 mm.

23. (Previously Presented): The article as claimed in claim 21, wherein the thickness of the layer ranges from 1 μm to 50 μm.

24. (Previously Presented): The article as claimed in claim 21, wherein the thickness of the layer ranges from 5 μm to 15 μm.

25. (Previously Presented): The article as claimed in claim 21, wherein the BET surface area of the powder ranges from 5 to 500 $m^2/g$.

26. (Previously Presented): The article as claimed in claim 21, wherein said silicon/titanium mixed oxide powder is a mixture of powders comprising at least one powder having a BET surface area of at least 170 $m^2/g$ and at least one powder having a BET surface

area of at most 70 $m^2/g$, wherein the ratio by weight of the powders with a lower BET to the powders with a higher BET surface area ranges from 40:60 to 99.5:0.5.

27. (Previously Presented): The article as claimed in claim 21, wherein the titanium dioxide content of the powder ranges from 0.1 to 99.9 wt.%.

28. (Previously Presented): The article as claimed in claim 21, wherein the titanium dioxide content of the powder ranges from 2 to 20 wt.%.

29. (Previously Presented): The article as claimed in claim 21, wherein the substrate is selected from the group consisting of borosilicate glass, silica glass, glass ceramic, and a material with a very low coefficient of expansion.

30. (Previously Presented): The article as claimed in claim 21, further comprising less than 0.5 wt.% of impurities.

31. (Withdrawn): A process for preparing an article as claimed in claim 21, comprising applying a dispersion containing a silicon/titanium mixed oxide powder to a substrate, and thermal treatment sintering the dispersion applied to the substrate to form a layer.

32. (Withdrawn): The process as claimed in claim 31, further comprising preparing the dispersion by flame hydrolyzing a silicon/titanium mixed oxide powder, wherein the proportion of powder ranges from 0.1 to 60 wt.% in the dispersion.

33. (Withdrawn): A method comprising coating a material comprising forming a layer by thermal treating an aqueous dispersion that has been applied to said material, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and wherein said silicon/titanium mixed oxide powder is a mixture of powders comprising at least one powder having a BET surface area of at least 130 $m^2/g$ and at least one powder having a BET surface area of at most 90 $m^2/g$, wherein the ratio by weight of the powders with a lower BET to the powders with a higher BET surface area ranges from 40:60 to 99.5:0:5 and wherein said material is selected from the group consisting of an ultra-low expansion material a photocatalytic material, a self-cleaning mirror, a superhydrophilic constituent, a lens, a container for a gas and a container for a liquid.

34. (Previously Presented): The article as claimed in claim 26, wherein the titanium dioxide content of the powder ranges from 2 to 20 wt.%.

## DISCUSSION OF THE AMENDMENT

Claims 1-8, 14 and 15 were previously canceled.

Claim 9 is currently amended.

Claims 10-13, 16, 17, 21-30 and 34 were previously presented.

Claims 18-20 and 31-33 are withdrawn.

The amendment to Claim 9 is supported in Example 5 on page 9, therefore, no new matter is believed to have been added.

Upon entry of the amendment Claims 9-13 and 16-34 will be pending with Claims 9-13, 16, 17, 21-30 and 34 under active consideration.